Message

From: Nordine, John [nordine.john@epa.gov]

Sent: 1/20/2016 8:52:12 PM **To**: Kay, Robert [rtkay@usgs.gov]

Subject: Re: Dec 2015 Monthly Progress Report--Techalloy, Union, IL

Bob, Thanks for the comments.

I will try an look the report at the office. I can not open the files today.

John

From: Kay, Robert <rtkay@usgs.gov> Sent: Friday, January 15, 2016 3:54 PM

To: Nordine, John

Subject: Dec 2015 Monthly Progress Report--Techalloy, Union, IL

John--I have the following comments on the Dec. 2015 Monthly Progress Report for the Techalloy Site in Union, IL.

- 1. Progress Made: the sample log in checklist for the submission that included the P&T System effluent notes some of the sample bottles were broken and others had a large bubble. Autumwood should provide information on which samples contained broken bottles and bubbles, and if there was sufficient volume in the other bottles for that sample to allow an uncompromised analysis—the checklist suggests there was. A full description of the issues with the integrity of the bottles needs to be provided so that we can have explicit assurances that the reported values in this document area accurate, and not compromised.
- 2. Why were two data loggers sent back to the factory? Were there two transducers put down one hole to monitor water levels? Were different transducer used for different dates? Autumwood should explain where each datalogger was deployed, and what each of them monitored.
- 3. What is meant by "...Central Wire will check them against the first two months of operation in the spring and discuss it in the following Monthly Progress Report"? This text seems to indicate two months of water-level data will be collected, the data will then be checked for accuracy, then the results will be written up and presented to EPA. This plan seems to mean that something like 3 months of data collection will take place before any errors will be evaluated, let alone corrected. The accuracy of the data should be checked when the logger is put in place—move the transducer up and down by a calibrated distance and verify the transducer data agree with the known movement. The accuracy of the data also should be checked by comparing transducer values and tape-down measurements of water level at the end of the first month, and every month thereafter. If the data don't agree, steps should be taken to improve the transducer readings.
- 4. Excepting the October 2014 result, MW-4 tested below the MCL for TCE since June 2012, not December 2012.
- 5. Picky point, but when the word "since" is used to describe what has transpired after something last happened, the date of last occurrence should be used. PCE concentrations in well MW-5 have been below 100 ppb since December 2012 (the date of last occurrence of 100 ppb-plus PCE) not since June 2013 (the date of the first occurrence of PCE <100 ppb). I'm not going to comment on each date in need of changing, but Autumwood needs to make the appropriate changes at several places in this report. Alternatively, Autumwood could say something like PCE concentrations were below 1000 ppb beginning in June 2013.

- 6. MW-5D, again, check the dates. Will not comment after here.
- 7. There is no figure 10 plotting data from well DGW-1S. Autumwood should correct the text.
- 8. For DGW-1D, note that "between" also is used incorrectly to describe the dates of VC exceedences of the MCL. Suggest something like "...from June 2013 through December 2015".
- 9. Where's the data for the DGW-2 wells? Even if there are no exceedences, the data should be provided, at least of the major VOCs in this area. These wells are close to the water-supply wells and it is important to understand what's going on at this location.
- 10. Monitoring wells, charts and graphs. The end date is incorrect for titles on figures 5 and 6.
- 11. Table 2. Technically, it appears stabilization criteria were not met before sampling in a few wells, ex. pH was not +/- 0.1 SU for three consecutive readings at MW-4 (would be OK if rounding off the readings, but I don't recall rounding being part of the procedure), MW-8, 18408 Rt. 176. DO stabilization of +/- 10percent also was not met at a few locations (MW-5D, maybe MW-9, DGW-2I, etc.)

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